United States Patent [19]

Chu

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[54] **PROCESS OF MAKING COLLAGEN MEMBRANES FOR MEDICAL USE**

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Related U.S. Application Data

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[52] **U.S. Cl.** **264/102;** 264/202; 264/209.5; 264/217; 264/232; 264/233; 264/299; 128/156; 128/DIG. 8; 514/21; 514/801; 530/356

[58] **Field of Search** 264/101, 108, 202, 209.1, 264/209.5, 217, 232, 233, 299, 102; 128/DIG. 8, 82, 155, 156; 260/123.7; 428/473; 514/21, 801; 604/368; 530/356

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[57] **ABSTRACT**

A process for preparing collagen membranes useful in tissue repair, and wound healing and related membranous implant materials useful in both hard and soft tissue applications is disclosed. The resulting membranes and materials have properties which can be varied as desired to suit intended use. Variation results from altering the precise conditions of formation of the membrane or of related fibers and solids. The process comprises first forming a gel from solubilized collagen, followed by converting the gel into a one-, two- or three-dimensional membranous solid form. This conversion is performed either by applying pressure to the gel, or by disrupting the gel and separating the resulting precipitate for casting.

9 Claims, 2 Drawing Figures